

# GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: Rubus ellipticus



System:	refrestriai

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Rosales	Rosaceae

#### Common name

Himalaya-Wildhimbeere (German), golden evergreen raspberry (English), broadleafed bramble (English), yellow Himalayan raspberry (English, Hawaii), Ceylon blackberry (English), eelkek (English), kohkihl (English, Kosrae), Molucca berry (English), Molucca bramble (English), Molucca raspberry (English), wild blackberry (English), wild raspberry (English), Asian wild raspberry (English), wa votovotoa (English, Fiji), wa sori (English, Fiji), wa ngandrongandro (English, Fiji), soni (English, Fiji), piquant lou-lou (French, Mauritius), robust blackberry (English, United States of America), yellow Himalayan raspberry (English)

**Synonym** 

Similar species

**Summary** 

Rubus ellipticus is a thorny shrub that originates from southern Asia. It has been introduced to several places, including Hawai'i, Southern USA and the UK, and is grown in cultivation for its edible fruits. This plant has become a major pest in Hawai'i, threatening its own native species of raspberry (Rubus Hawai'iensis), and the ability of this plant to thrive in diverse habitat types makes it a particularly threatening invasive plant.



view this species on IUCN Red List

# **Species Description**

Rubus ellipticus is a stout evergreen shrub with prickly stem that grows approximately 4.5 metres tall. Its stems are covered with prickles and reddish hairs. Leaves are alternate and compound with three round to blunt leaflets of 5 to 10 centimetres long. The underside of the leaves are lighter than the upper surface and covered with downy hairs. The flowers are small and white with five petals. The fruit is a round yellow cluster of druplets which is easily detached from the receptacle (Environmental laboratory Undated)

#### **Notes**

The Himalayan raspberry can support large populations of cosmopolitan *Drosophila* that breed primarily on rotting fruit (Foote Undated).

## Uses

The inner bark of the Rubus ellipticus plant is valued as a medicinal herb in traditional Tibetan medicine, including its use as a renal tonic and antidiuretic. Its fruits are edible and can also be used to produce a purplish blue dye (Plants For A Future 2002).



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## **Habitat Description**

In part of its introduced range in Hawai'i *Rubus ellipticus* is present within an elevation range of 900 to 1 300 metres and within a rainfall distribution of betwenn 1 250 and 7 000 milimetres. Plants of *R. ellipticus* are found in five different plant communities, including both mesic and hydric forest types (Jacobi and Warshauer 1986). It often invades land that has been disturbed by feral pigs (Smith, Hawaiian Alien Plant Studies).

## Reproduction

Flowers are hermaphrodite and are pollinated by insects. New stems are produced each year from perennial rootstock, these stems fruit in their second year and then die out (Plants For A Future 2002). The plant spreads rapidly by root suckers and regenerates from underground shoots after fire or cutting. Seeds are dispersed by fruit-eating birds and mammals (Benton 1997).

### **General Impacts**

This extremely thorny plant forms impenetrable thickets where it has become established, threatening native ecosystems (Jacobi and Warshauer 1986). In Hawaii this pest forms impenetrable thickets, threatening native lowland wet forests and displacing native plant species, including the native Hawaiian raspberry species *Rubus hawaiiensis* (Benton 1997).

### **Management Info**

If cleared manually, the roots of *R. ellipticus* must be burned. Cut stumps may be treated with systemic herbicides such as glyphosate (Benton 1997). Plants in this genus are notably susceptible to honey fungus (Plants For A Future 2002).

#### **Pathway**

This species was first introduced to Volcano on the island of Hawaii for its edible fruit (Degener and Degener 1968, in Jacobi and Warshauer 1986).

Principal source: Benton, Nancy. 1997.

Plants For A Future, 1996-2002.

**Compiler:** IUCN/SSC Invasive Species Specialist Group (ISSG)

**Review:** 

Pubblication date: 2006-07-20

# **ALIEN RANGE**

[1] HIMALAYAS [1] UNITED KINGDOM [4] UNITED STATES

#### **BIBLIOGRAPHY**

10 references found for Rubus ellipticus

#### **Managment information**

Benton, N. 1997. Rubus ellipticus Sm. Plant Conservation Alliance. Alien Plant Working Group

Summary: Ecological information, management information, distribution, reproduction and habitat information also.

. Available from: http://www.nps.gov/plants/alien/fact/ruel1.htm [Accessed 27 February 2003]

Motooka, P. 2000. Summaries of herbicide trials for pasture, range, and non-cropland weed control-1999. College of Tropical Agriculture and Human Resources of the University of Hawaii at Manoa.

**Summary:** Data published to assist applicators experimenting with herbicides for weed control.

#### **General information**



# **GLOBAL INVASIVE SPECIES DATABASE**

FULL ACCOUNT FOR: Rubus ellipticus

Environmental laboratory. Undated. Rubus ellipticus SM. var obcordatus Focke (Yellow Himalayan Raspberry). Apache/2.0.39 Server at www.wes.army.mil Port 80. (ERDC) Engineer Research and Development Center.

Summary: Distribution, description and impacts.

. Available from: http://www.wes.army.mil/el/pmis/plants/html/rubus\_el.htm [Accessed 27 February 2003]

Foote, D. Undated. Drosophila as Monitors of Change in Hawaiian Ecosystems...

Summary: Ecological information.

. Available from: http://biology.usgs.gov/s+t/noframe/t233.htm#26862 [Accessed 27 February 2003]

Gardner, D.E. University of Hawaii, Botany Department.

**Summary:** Distribution and Impacts of the yellow raspberry.

. Available from: http://www.botany.hawaii.edu/faculty/gardner/biocontrol/Rubus%20spp/rubusell.htm [Accessed 27 February 2003] ITIS (Integrated Taxonomic Information System), 2005. Online Database Rubus ellipticus

**Summary:** An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals. Available from:

http://www.cbif.gc.ca/pls/itisca/taxastep?king=every&p\_action=containing&taxa=Rubus+ellipticus&p\_format=&p\_ifx=plglt&p\_lang=[Accessed March 2005]

Jacobi, J. and Warshauer, F.R. 1986. Distribution of Six Alien Plant Species in Upland Habitats on the Island of Hawaii.

**Summary:** Available from: http://www.hear.org/books/apineh1992/pdfs/apineh1992ii2jacobiwarshauer.pdf [Accessed 27 February 2003] Meyer, J.-Y. 2000. Invasive plants in the Pacific Islands. In: The Invasive Species in the Pacific: A Technical Review and Draft Regional Strategy. Sherley, G. (tech. ed). Published in June 2000 by the South Pacific Regional Environment Programme (SPREP).

**Summary:** Resource that includes the distribution of invasive species throughout the Pacific Islands.

Plants For A Future. 2002.

**Summary:** Distribution, description, Uses and propagation details.

. Available from: http://www.comp.leeds.ac.uk/cgi-bin/pfaf/arr\_html?Rubus+ellipticus&CAN=LATIND [Accessed 27 February 2003] Smith, C.W. Undated. Hawaiian Alien Plant Studies. University of Hawaii, Botany Department.

Summary: Some distribution and Habitat information.

. Available from: http://www.botany.hawaii.edu/faculty/cw smith/rub ell.htm [Accessed 27 February 2003]